

IN THE CLAIMS

Please amend the claims as follows:

1-44. (Canceled)

45. (Currently Amended) A capacitor comprising:

a first flat stack of capacitive elements where each element comprises an flat anode plate and a flat cathode plate with an electrolyte interposed therebetween; and,

a second flat stack of capacitive elements, wherein the first and second flat stacks are enclosed in separate compartments of a capacitor case that electrically isolate the electrolytes of each flat stack from one another.

46. (Original) The capacitor of claim 45 wherein the first and second stacks are in their separate compartments having a common wall.

47. (Original) The capacitor of claim 45 wherein the anode and cathode plates of each stack are electrically isolated from the case and further wherein, for each stack, each anode plate is connected by a conductor and each cathode plate is connected by a conductor, the conductors coupled to respective anode and cathode terminals.

48. (Original) The capacitor of claim 47 wherein the cathode terminal of the first stack is electrically connected to the anode terminal of the second stack.

49. (Original) The capacitor of claim 47 wherein the conductors are connected to external terminals.

50. (Original) The capacitor of claim 46 wherein the cathode terminal of the first stack and the anode terminal of the second stack are electrically connected to the case such that the capacitance between an anode terminal of the first stack and a cathode terminal of the second stack is equivalent to the capacitance of each stack connected in series, the case being conductive and serving as an electrical connection between the stacks.

51. (Original) The capacitor of claim 50 wherein the case is enclosed by an insulating coating.

52. (Original) The capacitor of claim 45 further comprising a third stack of capacitive elements enclosed in a separate compartment of the capacitor case.

53. (Currently Amended) A method for constructing a capacitor, comprising:
providing a first flat stack of capacitive elements where each element comprises ~~an~~ flat anode plate and a flat cathode plate with an electrolyte interposed therebetween;
providing a second flat stack of capacitive elements; and,
enclosing the first and second flat stacks in separate compartments of a capacitor case that electrically isolate the electrolytes of each compartment.

54. (Original) The method of claim 53 further comprising stacking the first and second stacks vertically in their separate compartments separated by a common wall.

55. (Original) The method of claim 53 further comprising:
electrically isolating the anode and cathode plates of each stack from the case; and,
for each stack, electrically connecting each anode plate by a conductor and each cathode plate by a separate conductor, the conductors being routed to respective anode and cathode terminals.

56. (Original) The method of claim 55 further comprising electrically connecting the cathode terminal of the first stack to the anode terminal of the second stack such that the capacitance between the anode terminal of the first stack and the cathode terminal of the second stack is equivalent to the capacitance of each stack connected in series.

57. (Original) The method of claim 55 further comprising routing the conductors via feedthroughs out of the case to external terminals.

58. (Original) The method of claim 55 further comprising electrically connecting the cathode terminal of the first stack and the anode terminal of the second stack to the case such that the capacitance between an anode terminal of the first stack and a cathode terminal of the second stack is equivalent to the capacitance of each stack connected in series, the case being conductive and serving as an electrical connection between the stacks.

59. (Currently Amended) A capacitor comprising:
a conductive case including first and second electrically isolated compartments;
a first flat stack of one or more flat capacitive elements in the first compartment; and
a second flat stack of one or more flat capacitive elements in the second compartment.

60. (Original) The capacitor of claim 59, wherein each capacitive element includes electrolyte between an anode and a cathode.

61. (Original) The capacitor of claim 60, wherein the anode of each capacitive element in the first compartment is electrically coupled to the case, and the cathode of each capacitive element in the second compartment is electrically coupled to the case.

62. (Original) The capacitor of claim 59, wherein the first and second isolated compartments have a common wall and wherein at least one of the first and second stacks of capacitive elements is stacked in a dimension generally perpendicular to the common wall.

63-99. (Canceled)

100. (New) The capacitor of claim 59, wherein each capacitive element includes a plurality of flat metal layers.

101. (New) The capacitor of claim 59, wherein each capacitive element includes a flat anode plate and a flat cathode plate.